A New Multimodulus Blind Equalization Algorithm

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Summary

A new algorithm is presented for the blind equalization of complex signals. This algorithm can be considered as a variant of the well-known reduced constellation algorithm (RCA). The proposed algorithm is obtained by removing the discontinuity found in the RCA cost function. The steady-state performance of the proposed algorithm is demonstrated by simulations. In addition, closed form expressions are obtained for the dispersion constants and the minimum of the cost functions. The phase-recovery and intersymbol interference optimization properties, exhibited by the proposed algorithm, are also discussed.